

Amendments to the Specification:

Please modify the paragraph at page 26, lines 16-22 in the following manner:

In the case that a protruding lesion exists, out of the line segments that connect any 2 points in the bronchi area 180 of Fig. 18, on line segment 181 which passes the lumen of bronchi, the sum of the pixel value on the line segment turns out as $\text{sum} < 0$ or $\text{sum} > 0$. On line segment ~~62~~ 182 which connects 2 points of the protruding lesion portion, the sum of the pixel value on the line segment turns out as $\text{sum} = 0$.

Please modify the paragraphs at page 53, line 19 through page 54, line 11 in the following manner:

CPU 11 calculates dimension S_c or degree of circularity C_c of the bronchi lesion candidate region (hereinafter referred as sub region candidate), R_S which is an area ratio comparing with the reference region, degree of deformation (degree of constriction) W , edge ratio E , gravity point coordinate G_c . The degree of constriction here is the quantity represented as $W = S_w / S_c$ using dimension of sub region candidate S_c when the dimension of constricted part 502 out of sub region candidate 501 in ROI500 is set as S_w as illustrated in Fig. ~~35~~ 33. When the constricted part does not exist as region 503, the degree of constriction is represented as $W = 0$. However in the case there is no part that adjoining the periphery, the degree of constriction is represented as $W = 1$. Also, the edge ratio is, as seen in Fig. 34, with the length of the part that the periphery of ROI600 and sub region candidate 601 is tangent being set as LE and using the length of periphery L_{ROI} of ROI600, the quantity represented as $E = LE / L_{ROI}$.